

CLAIMS

1. Apparatus comprising:
an inkjet print head including:
 - a plurality of nozzles for forming ink drops to be ejected onto print
5 media in an ink jet printer;
 - a print head resistor for firing the nozzles;
 - a capacitor on the ink jet print head for supplying current to heat the
print head resistor to cause the nozzles to fire.
2. The apparatus of claim 1, wherein the capacitor has a capacitance of about
10 22 μ F.
3. Apparatus comprising:
an inkjet print head including:
 - a plurality of nozzles for forming ink drops to be ejected onto print
media in an ink jet printer;
 - 15 a print head resistor for firing the nozzles;
 - a capacitor means on the ink jet print head for supplying current to heat
the print head resistor to cause the nozzles to fire.
4. The apparatus of claim 3, wherein the capacitor means includes two or
more capacitors.
- 20 5. The apparatus of claim 3, wherein the capacitor means includes a surface
mount package.
6. The apparatus of claims 3, 4, or 5, wherein the capacitor means has a
capacitance of about 22 μ F.
7. The apparatus of any prior claim, wherein the capacitor or capacitor means
25 comprise layer ceramic or tantalum material.
8. The apparatus of any prior claim, wherein the capacitor or capacitor means
is around 2.0-3.2 mm wide by 1.25-2.5 mm long by 0.5 mm high.
9. The apparatus of any prior claim, wherein the capacitor or capacitor means
is around 3.2 mm wide by 2.5 mm long by 0.5 mm high.
- 30 10. The apparatus of any prior claim, wherein the capacitor or capacitor
means is around 3.2 mm wide by 1.6 mm long by 0.5 mm high.

11. The apparatus of any prior claim, wherein the capacitor or capacitor means is around 2.0 mm wide by 1.25 mm long by 0.5 mm high.

12. The apparatus of any prior claim, further comprising an inkjet print head cartridge comprising the inkjet print head.

5 13. The apparatus of claim 12, further comprising an ink jet printer comprising the inkjet print head cartridge.

14. A method of improving power delivery to ink nozzle firing elements of an ink jet print head, comprising positioning an ink nozzle firing capacitor means on the ink jet print head.

10 15. The method of claim 14, wherein the capacitor means includes a capacitor.

16. The method of claim 14, wherein the capacitor means includes two or more capacitors.

15 17. The method of claim 14, wherein the capacitor means includes a surface mount package.

18. The method of claims 14, 15, 16, or 17, wherein the capacitor means has a capacitance of about 22 μ F.

19. The method of any prior method claim, wherein the capacitor or capacitor means comprise ceramic layered or tantalum material.

20 20. The method of any prior claim, wherein the capacitor or capacitor means is around 2.0-3.2 mm wide by 1.25-2.5 mm long by 0.5 mm high.

21. The method of any prior method claim, wherein the capacitor or capacitor means is 3.2 mm wide by 2.5 mm long by 0.5 mm high.

22. The method of any prior method claim, wherein the capacitor or capacitor means is 3.2 mm wide by 1.6 mm long by 0.5 mm high.

23. The method of any prior method claim, wherein the capacitor or capacitor means is 2.0 mm wide by 1.25 mm long by 0.5 mm high.

24. The method of any prior method claim, further comprising installing the inkjet print head in an inkjet print head cartridge.

30 25. The method of claim 24, further comprising installing the inkjet print head cartridge in an ink jet printer.

26. The invention of any prior claim, wherein the print head is a CMOS print head.

27. The invention substantially as shown and described herein.